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10/767,432

01/30/2004

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EXAMINER

WONG, BLANCHE

ART UNIT

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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/767,432

Applicant(s)

IIJIMA ET AL.

Examiner

Blanche Wong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the configuration console that has a display screen and command input means (claim 10) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Objections

2. **Claims 1-10** are objected to because of the following informalities:

With regard to claim 1-10, Examiner suggests replacing "virtual router of 1" with "first virtual router".

With regard to claim 6, line 4, Examiner suggests spelling out VRRP when abbreviation is used for the first time.

With regard to claim 7, line 4, Examiner suggests spelling out VRID when abbreviation is used for the first time.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, it is unclear whether it is a redundancy packet transmission router claim, or a active or standby router claim, because lines 6-7 indicates "each of said active router and said standby router comprising:", not "the redundancy packet transmission router comprising:"

With regard to claim 1, line 18, it is unclear what is meant by "virtual router of 1", whether that means one virtual router. Additionally, there is no "virtual router of 2" or more than one virtual routers in the claim language, so it is unclear whether a differentiation of virtual routers, namely "virtual router of 1", is necessary.

With regard to claim 1, line 24, it is unclear what is "identification information of 1", whether there is one identification information or "1" is the number one.

With regard to claim 1, line 26, it is unclear whether "said identification information" is the same as "identification information of 1" in line 24. Similarly in claim 4-8.

With regard to claim 2, lines 6-7, and claim 9, lines 2-4, and claim 10, lines 4-5, it is unclear how "an identifier indicating how said corresponding virtual router on said standby router processes" or how "an identifier indicating how said corresponding virtual router processes".

With regard to claim 9, lines 2-4, it is unclear whether "said identifier indicating how said corresponding virtual router processes" is the same as "an identifier indicating how said corresponding virtual router on said standby router processes" in claim 2, lines 6-7.

With regard to claim 10, lines 4-5, it is unclear whether "said identifier indicating how said corresponding virtual router processes" is the same as an identifier indicating

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how said corresponding virtual router on said standby router processes" in claim 2, lines 6-7.

5. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, lines 20-22, "the corresponding one of the virtual routers realized on said standby router".

Claim 1, lines 22-23, "said processor provided on said active router".

Claim 1, lines 26-28, "said identification information from said corresponding virtual router of 1 realized on said standby router".

Claim 3, lines 3-5, "said routing information managed by said corresponding virtual router realized on said standby router".

Claim 5, lines 9-10, "the transfer processing".

Claim 9, line 3, "said corresponding virtual router processes".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. **Claims 1-10** are rejected under 35 U.S.C. 102(a) as being anticipated by Srikanth et al. (U.S. Pat NO. 6,556,547).

With regard to claim 1, Srikanth discloses a redundancy packet transmission router **(see master and backup virtual routers 1 and 2 in Fig. 2, col. 2, line 9)** comprising:

a network interface **(Srikanth discloses a redundancy packet transmission router comprising virtual routers connected to nodes 1-n in Fig. 2. Srikanth does not expressly teach a network interface of a router. Nevertheless, the recited network interface is inherent in routers connected to nodes as taught in Srikanth.)** accommodating communication channels;

a processor **(processor) (processor-readable medium, col. 6, line 44)** for making a predetermined process on a received packet;

a table memory **(network address translation tables can be stored on the machine-readable medium, col. 6, lines 51-52)** for storing routing information **(network address translation)** necessary for the routing processing of said received packet; and

a program memory **(software product stored on a machine-readable medium, col. 6, line 41)** in which a program to be executed by said processor is previously stored, whereby when said routing information managed by a virtual router of 1 of said plurality of virtual routers realized on said active router **(master router in Fig. 2, col. 2, line 11)** is synchronized **(synchronizing network address translation tables, col. 6, line 51)** with said routing information to be managed by a corresponding one of the virtual routers realized on said standby router **(backup router in Fig. 2, col. 2, line 12)**, said processor provided on said active router **(e.g. master 1 in master virtual router 1 in Fig. 2)** transmits to said standby router **(the master virtual router**

periodically transmits advertisements ... to the backup virtual router(s), vol. 2, lines 34-35) a packet including identification information that indicates said virtual router of 1 (to indicates to the backup(s) that it is still functioning as the master virtual router, col. 2, lines 36-38), receives a response signal (a shutdown event) (if the master virtual router 1 fails ... a shutdown event, col. 2, line 43) relative to said identification information from said corresponding virtual router of 1 realized on said standby router (e.g. master 2 in backup virtual router 2 in Fig. 2), and transmits to said standby router said routing information (routing capability) that said virtual router of 1 of said active router manages (backup virtual router 1 takes over as the new master virtual router 1, providing routing capability for nodes ... Since both [master and backup] routers maintain the same IP address, col. 2, lines 44-46).

With regard to claim 2, Srikanth further discloses an identifier indicating how said corresponding virtual router on said standby router processes (see VRID=2 in Fig. 2).

With regard to claim 3, Srikanth further discloses routing information (**routing capability**) managed by said corresponding virtual router (**e.g. master 2 in backup virtual router 2 in Fig. 2**) realized on said standby router (**backup virtual router**) (**backup virtual router takes over as the new master virtual router, providing routing capability for nodes ... Since both [master and backup] routers maintain the same IP address, col. 2, lines 44-46).**

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With regard to claim 4, Srikanth further discloses "periodically transmits" (periodically transmits, col. 2, line 34).

With regard to claim 5, Srikanth further discloses the standby router has a counter (**master-down_timer**) (**master-down_timer expires, col. 2, line 42**). Srikanth discloses a standby router comprising a counter that expires (**master-down_timer expires, col. 2, line 42**). Srikanth does not expressly teach the recited predetermined time of the counter. Nevertheless, the recited predetermined time is inherent in a counter that expires as taught in Srikanth.

With regard to claim 6, Srikanth further disclose the transfer processing (**takes over**) (**a shutdown event ... backup virtual router takes over as the new master virtual router, col. 2, lines 43-45**).

With regard to claims 7 and 9, Srikanth further discloses VRID (**VRID in Fig. 2**) field of said VRRP (**VRRP, col. 2, line 28**) packet (**See A/so formatted as IP multicasts, col. 2,line 35**).

With regard to claim 9, Srikanth further discloses a type (**VRID in Fig. 2**) field (**See A/so formatted as IP multicasts, col. 2,line 35**).

With regard to claim 10, Srikanth discloses a router comprising software code stored in memory (**software product stored on a machine-readable medium, col. 6,**

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line 42). Srikanth does not expressly teach a command entered through command input means. Nevertheless, the recited a command by someone is like software code written by someone and a command entered through command input means is like extracting and executing the software code in memory. Therefore, the recited a command entered through command input means is inherent in the software code stored in memory as taught in Srikanth.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BW

July 30, 2007

EDAN ORGAD
PRIMARY PATENT EXAMINER

Edan Orgad 8/6/07